Table 1 Comparison of women with and without chlamydia infection

	Positive *C trachomatis* PCR	Negative *C trachomatis* PCR	p Value
Median age	24 (range 19–40)	28 (range 15–68)	0.182
LGEA/HGEA	5 (22%)	106 (15%)	0.37
Other pathogens	1 (17%)	12 (18%)	NS
Inflammation on Pap test	6 (26%)	65 (9%)	<0.01

LGEA, low grade epithelial abnormalities; HGEA, high grade epithelial abnormalities.

The association of inflammation on Pap testing and chlamydial infection has been previously examined with variable methodologies and findings.[5] We utilised the same sample (ThinPrep) for determining both the presence of inflammatory changes on Pap test and chlamydia infection and found a positive association between the two despite a low prevalence population. Our study confirms the feasibility of performing chlamydia PCR from liquid based cytology samples in a routine diagnostic setting. Testing for chlamydia should be considered in women with inflammatory Pap tests for which there is no other explanation.

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Cardiovascular syphilis in HIV infection: a case-control study at the Institute of Sexually Transmitted Diseases, Chennai, India

It is known that HIV co-infection with syphilis may accelerate the onset of gummata and neurosyphilis and increase their severity. However, this has only been reported for cardiovascular syphilis in two previous cases.[1 2]

This case-control study deals with a total of 14 HIV seropositive and 100 HIV 1 and 2 seronegative individuals with syphilis, who were seen in our clinic between June 2000 and May 2001. Of the 14 HIV seropositive individuals, 12 were reactive for VDRL (venereal diseases reference laboratory) and TPHA (*Treponema pallidum* haemagglutination assay) and two had primary syphilis confirmed by dark field examination for *T pallidum*. Of the 100 HIV seronegative individuals, 85 had reactive VDRL and TPHA and 15 had primary syphilis confirmed by dark field examination. The prevalence of cardiovascular syphilis in the HIV seropositive and seronegative groups was 14.3% and 2%, respectively (OR 8.2; 95% CI 1.1 to 61.5).

Two HIV seropositive individuals with cardiovascular syphilis had aortic root dilatation while the two HIV seronegative individuals had aortic aneurysm. The HIV seropositive individuals were asymptomatic with regard to cardiac status but one HIV seronegative individual had chest pain and the other was asymptomatic. None in the HIV seronegative group had aortic root dilatation ($p<0.01$). There was a theoretical possibility that aortic root dilatation could be a manifestation of HIV or opportunistic infections involving the heart. A parallel study done on cardiovascular involvement in HIV seropositive individuals from the same institute during the same time interval had revealed that none of the 61 non-syphilitic HIV seropositive individuals had aortic root dilatation, compared with 2 out of 14 with syphilis ($p<0.01$; paper in preparation).

The mean duration of diagnosing cardiovascular syphilis from the time of acquiring syphilis was 40 months (27 and 53) in the HIV seropositive group and 102 months (84 and 120) in the HIV seronegative group. The mean age of the HIV seropositive individuals who had cardiovascular syphilis was 31.5 years (29 and 34) and that of HIV seronegative individuals was 45.5 years (44 and 47).

The shorter duration for diagnosing cardio vascular syphilis from the time of acquiring syphilis for the HIV seropositive group (40 months) compared with the HIV seronegative group (102 months) ($p<0.003$) could be explained by the fact that HIV hastens the progression to late syphilis,[3] which might be due to an alteration to the immune system. It could also be possible that HIV infected individuals seek medical attention because of opportunistic infections, which might have led to the earlier diagnosis of cardiac lesions because the two individuals with aortic root dilatation were asymptomatic with regard to cardiac status. The difference in the clinical manifestation of cardiovascular syphilis between these two groups could not be explained at this point of time.

Contributions

MM designed the study, collected the data, interpreted the results, and analysed the results and statistics; SKG contributed to collecting data, interpretation of results and laboratory collaboration.

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Antiretroviral therapy—alternative uses

Recently, while speaking to a patient from Nigeria I was very concerned to discover that she had been taking combivir for breast enhancement. On closer questioning it appears that she had accessed this drug, passed to her in individual sachets with no information insert etc, via a friend. Her friend, knowing that my patient wished for larger breasts, had passed her the combivir to use on an as required basis for breast enhancement. My patient claims that the drug did work to enlarge her breasts.

The drugs were apparently prescribed by a doctor in Nigeria at the cost of about US$250 for six sachets and the pharmacist dispensing them had been asking why the girls were taking them. Apparently the sachets did not come with any leaflets or drug information inserts.

My patient and her friends appeared to be totally unaware of the fact that the combivir was for use in HIV therapy and were unaware of any potential side effects from the drug. It was only when my patient was surfing the web that she found out about the licensed use for combivir.

My patient, sadly, acquired HIV from a blood transfusion in Africa and on primary resistance testing showed very broad nucleoside reverse transcriptase inhibitor resistance and apparent full sensitivity to protease inhibitors and non-nucleoside reverse transcriptase inhibitors (NNRTIs). Resistance to